Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION **TRANSMITTAL**

Attorney Docket No. 19111.0035 First Inventor or Application Identifier Ravi Kanth V. Kothuri NEAREST NEIGHBOR QUERY PROCESSING IN A LINEAR QUADTREE SPATIAL INDEX

Express Mail Label No (Only for new nonprovisional applications under 37 C.F.R. § 1.53(b)) Assistant Commissioner for Patents APPLICATION ELEMENTS ADDRESS TO Box Patent Application Washington, DC 20231 See MPEP chapter 600 concerning design patent application contents. 7. CD-ROM or CD-R in duplicate, large table or Fee Transmittal Form (e.g., PTO/SB/17) 1. 🛛 Computer Program (Appendix) (Submit an original and a duplicate for fee processing) 8. Nucleotide and/or Amino Acid Sequence Submission Applicant claims small entity status. 2. (if applicable, all necessary) See 37 CFR 1.27. a. Computer Readable Form (CRF) Total Pages 33 з. 🛛 Specification b. Specification Sequence Listing on: (preferred arrangement set forth below) i. CD-ROM or CD-R (2 copies); or - Descriptive title of the Invention - Cross References to Related Applications ii. 🔲 paper - Statement Regarding Fed sponsored R & D c. Statements verifying identity of above copies - Background of the Invention ACCOMPANYING APPLICATIONS PARTS Brief Summary of the Invention - Brief Description of the Drawings (if filed) Assignment Papers (cover sheet & document(s)) 9. 🛛 - Detailed Description Power of 37 C.F.R.§3.73(b)Statement 10. - Claim(s) - Abstract of the Disclosure (when there is an assignee) Attorney English Translation Document (if applicable) 11. 🔲 [Total Sheets Drawing(s) (35 U.S.C 113)] 4. 🛛 [Total Pages Copies of IDS 1 12. 🗍 Information Disclosure 5. Oath or Declaration Citations Statement (IDS)/PTO-1449 a. Newly executed (original or copy) b. Copy from a prior application (37 CFR 1.63 (d)) 13. 🔲 Preliminary Amendment Return Receipt Postcard (MPEP 503) (for a continuation/divisional with Box 17 completed) 14. 🛛 (Should be specifically itemized) i DELETION OF INVENTOR(S) Certified Copy of Priority Document(s) Signed statement attached deleting inventor(s) 15. 🔲 (if foreign priority is claimed) named in the prior application, see 37 CFR Other: Request and Certification Under 35 U.S.C. 1.63(d)(2) and 1.33(b). 16. 🛛 6. Application Data Sheet. See 37 CFR 1.76 122(b)(2)(B)(i) 17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: of prior application No: _ ☐ Continuation-in-part (CIP) ☐ Continuation ☐ Divisional Group / Art Unit Examiner Prior application information: For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 17. CORRESPONDENCE ADDRESS Correspondence address below □ Customer Number or Bar Code Label (Insert Customer No or Attach bar code label here) **Edward Pennington** Name Swidler Berlin Shereff Friedman, LLP 3000 K Street, N.W. Address Suite 300 20007-5116 D.C. Zip Code State City Washington 202 424-7647 Fax 202 424-7500 Telephone Country USA Registration No. (Attorney/Agent) 37,134 Eric J. Franklin Name (Print/Type) June 7 2001 Date

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| FEE TRANSMITTAL | Application Number | June 2 9 , 2001 | | |
| for FY 2001 | Filing Date | | | |
| | First Named Inventor | Ravi Kanth V. Kothuri | | |
| Patent fees are subject to annual revision | Examiner Name | | | |
| | Group / Art Unit | | | |
| TOTAL AMOUNT OF PAYMENT (\$) 1028 | Attorney Docket No. | 19111.0035 | | |

| TOTAL AMOUNT OF PAYMENT (\$) 1028 | | | | | | | | | Attorne | ey Docke | t No. | 19111.0035 | | | | |
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| METHOD OF PAYMENT (check one) | | | | | | | | | | | | | FEE CALCULATION (continued) | | | |
| 57 | The Commissioner is hereby authorized to charge | | | | | | | | | 3. ADDITIONAL FEES | | | , | | | |
| 1. | indicated fees and credit any over payments to: | | | | | | _ | Large Entity | _ | Small Entity | | . | | | | |
| Depos Accou | | 195127 | Order | # 19111.0 | 035 | | | | | Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | Fee Paid | |
| Numb | | 193121 | , Order | יוווטויי. | ,,,,,, | | | 1 | | 105 | 130 | 205 | 65 | Surcharge - late filing fee or oath | | |
| Dono | oit | | | | | | | | | 127 | 50 | 227 | 25 | Surcharge - late provisional filing fee or cover sheet. | | |
| Depo: | | Swidler | Berlin : | Shereff Fr | iedm | an, LLP | | 1 | | 139 | 130 | 139 | 130 | Non-English specification | | |
| Name | | L | | | | ~ | | | | 147 | 2,520 | 147 | 2,520 | For filing a request for reexamination | | |
| Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 | | | | | | | | | 112 | 920* | 112 | 920* | Requesting publication of SIR prior to Examiner action | | | |
| | Applicant c See 37 CF | | II entity | status. | | | | | | 113 | 1,840* | 113 | 1,840* | Requesting publication of SIR after Examiner action | | |
| 2. | Paymen | t Enclose | d: | | | | | | | 115 | 110 | 215 | 55 | Extension for reply within first month | | |
| | Check | ☐ Cred | it card | | | , 🗆 | Othe | r | | 116 | 390 | 216 | 195 | Extension for reply within second month | | |
| Order | | | | | | | | | | 117 | 890 | 217 | 445 | Extension for reply within third month | | |
| 1. BASIC FILING FEE | | | | | | | | | 118 | 1,390 | 218 | 695 | Extension for reply within fourth month | | | |
| Large | Entity S | | ntity | | | | | | | 128 | 1,890 | 228 | 945 | Extension for reply within fifth month | | |
| Fee | Fee F | ee F | ee | Fee Desc | riptic | n | | | | 119 | 310 | 219 | 155 | Notice of Appeal | | |
| Code | | | \$) | | | | | ee Paid | 7 | 120 | 310 | 220 | 155 | Filing a brief in support of an appeal | | |
| 101 | | | | Utility filing | | | 71 | 10 | 4 | 121 | 270 | 221 | 135 | Request for oral hearing | | |
| 106 107 | | | | Design filing | - | Э | - | | - | 138 | 1,510 | 138 | 1,510 | Petition to institute a public use proceeding | | |
| 108 | 710 2 | :08 3 | 55 | Reissue fi | ling f | ее | | | | 140 | 110 | 240 | 55 | Petition to revive – unavoidable | | |
| 114 | 150 214 75 Provisional filling fee | | | | | | 141 | 1,240 | 241 | 620 | Petition to revive - unintentional | | | | | |
| | | | | | | | 142 | 1,240 | 242 | 620 | Utility issue fee (or reissue) | | | | | |
| SUBTOTAL (1) (\$) 710 | | | | | | | 143 | 440 | 243 | 220 | Design issue fee | | | | | |
| 2. EXTR | RA CLAIM | FEES | | | | | | | | 144 | 600 | 244 | 300 | Plant issue fee | | |
| | | | | Extra | | Fee from | | Fee | | 122 | 130 | 122 | 130 | Petitions to the Commissioner | | |
| Total Clain | ns 31 | -20* | * = [| Claims 11 |) x | below 18 |] = | Paid 198 |] | 123 | 130 | 123 | 130 | Petitions related to provisional applications | | |
| Independer Claims | nt 4 | -3** | = | 1 | x | 80 | = | 80 | | 126 | 180 | 126 | 180 | Submission of Information Disclosure Stmt | | |
| Multiple Dependent | | | · | | X | |] = | 0 | | 581 | 40 | 581 | 40 | Recording each patent assignment per property (times number of properties) | 40.00 | |
| Large Fee | Entity Fee | Smali Fee | Entit Fee | - | _ | | | | | 146 | 710 | 246 | 355 | Filing a submission after final rejection (37 CFR § 1.129(a)) | | |
| Code 103 | (\$) 18 | Code 203 | (\$) 9 | Fee De | | • |) | | | 149 | 710 | 249 | 355 | For each additional invention to be examined (37 CFR § 1.129(b)) | | |
| 103 | 80 | 203 | 40 | | Claims in excess of 20 | | | | | | | | | | | |
| 102 | 270 | 204 | 135 | | Independent claims in excess of 3 Multiple dependent claim, if not paid | | | | | 179 | 710 | 279 | 355 | Request for Continued Examination (RCE) | | |
| 109 | 80 | 209 | ** Reissue independent claims over | | | | | 169 | 900 | 169 | 900 | Request for expedited examination of a design application | | | | |
| 110 | 18 210 9 ** Reissue clarms in excess of 20 and over original patent | | | | | | | | | | | | | | | |
| | | | s | UBTOTAL | . (2) | (\$) 27 | 8 | | | Other | Other fee (specify) | | | | | |
| **or number previously paid, if greater; For Reissues, see above | | | | | | | *Redu | iced by B | asic Fili | ng Fee F | raid SUBTOTAL (3) (\$) 40 | | | | | |
| **or nun | nber previou | usiy paid, ii | r greate | r; For Keiss | sues, | see above | | | | | | | | | | |

| SUBMITTED BY Complete (if applicable) | | | | | | | | | | | | |
|---------------------------------------|------------------|----------------------------------|--------|-----------|-----------------------|--|--|--|--|--|--|--|
| Name (Print/Type) | Eric J. Franklin | Registration No. Attorney/Agent) | 37,134 | Telephone | 202 424-7500 | | | | | | | |
| Signature | 920 | Juston | | Date | June 27 , 2001 | | | | | | | |

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PTO/SB/35 (11-00)

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Ravi Kanth V. Kothuri First Named Inventor REQUEST AND CERTIFICATION Nearest Neighbor Query Processing in a Linear UNDER Title Quadtree Spatial Index 35 U.S.C. 122(b)(2)(B)(I) 19111.0035 Attv Docket Number

I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached papplication not be published under 35 U.S.C. 122(b).

Eric J. Franklin, Reg. No. 37,134 Typed or Printed Name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application upon filing.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant must notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii).

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